

What is claimed is:

1        1. A deflectable thermometer probe comprising:  
2        a bendable probe body having a hollow pipe;  
3        a hollow tip member secured to the bendable probe body  
4                and having a thermal contact surface;  
5        a thermal sensor mounted on the inside of the thermal  
6                contact surface of the hollow tip member, for  
7                sensing the temperature of the thermal contact  
8                surface and producing a temperature signal;  
9        a set of lead wires coupled to the thermal sensor for  
10                transmission of the temperature signal; and  
11        a deflectable member having a main portion disposed in  
12                the hollow pipe of the bendable probe body, wherein  
13                deformation of the main portion occurs when the  
14                bendable probe body is subjected to a force, and the  
15                deformation cannot be undone by a return force from  
16                the bendable probe body when the applied force is  
17                removed, thereby the bendable probe body is  
18                sustained in a bent form.

1        2. The probe as recited in claim 1 wherein the main  
2        portion of the deflectable member is constructed by a  
3        deflectable metal wire.

1        3. The probe as recited in claim 1 wherein the hollow  
2 pipe has at least a portion with a diameter greater than that  
3 of the main portion of the deflectable member.

1        4. The probe as recited in claim 1 wherein the hollow  
2 pipe provides a space for the deformation of the main portion  
3 of the deflectable member.

1        5. The probe as recited in claim 1 wherein the lead wires  
2 run through the hollow pipe in the bendable probe body.

1        6. The probe as recited in claim 1 wherein a protecting  
2 head formed at a front end of the deflectable member is  
3 disposed in the hollow tip member to avoid the deflectable  
4 member cutting off the lead wires.

1        7. The probe as recited in claim 1 wherein a groove is  
2 defined in the bendable probe body's end portion and a  
3 corresponding hook formed at a back end of the deflectable  
4 member is embedded in the groove.

1        8. A thermometer with a deflectable probe, comprising:  
2        a body member including a bendable probe body and a  
3                display portion, the bendable probe body having a  
4                hollow pipe;  
5        a hollow tip member secured to the bendable probe body  
6                and having a thermal contact surface;  
7        a thermal sensor mounted on the inside of the thermal  
8                contact surface of the hollow tip member, for  
9                sensing the temperature of the thermal contact  
10                surface and producing a temperature signal;  
11        a set of lead wires coupled to the thermal sensor for  
12                transmission of the temperature signal;  
13        a deflectable member having a main portion disposed in  
14                the hollow pipe of the bendable probe body, wherein  
15                deformation of the main portion occurs when the  
16                bendable probe body is subjected to a force, and the  
17                deformation cannot be undone by a return force from  
18                the bendable probe body when the applied force is  
19                removed, thereby the bendable probe body is  
20                sustained in a bent form; and  
21        a display mounted on the display portion and connected to  
22                the lead wires to receive the temperature signal for  
23                display of a corresponding temperature reading.

1           9. The thermometer as recited in claim 8 wherein the main  
2   portion of the deflectable member is constructed by a  
3   deflectable metal wire.

1           10. The thermometer as recited in claim 9 wherein the  
2   deflectable metal wire is made of copper.

1           11. The thermometer as recited in claim 8 wherein the  
2   hollow pipe has at least a portion with a diameter greater  
3   than that of the main portion of the deflectable member.

1           12. The thermometer as recited in claim 11 wherein the  
2   lead wires run through the hollow pipe in the bendable probe  
3   body.

1           13. The thermometer as recited in claim 8 wherein the  
2   hollow pipe provides a space for the deformation of the main  
3   portion of the deflectable member.

1           14. The thermometer as recited in claim 8 wherein a  
2   protecting head formed at a front end of the deflectable  
3   member is disposed in the hollow tip member to avoid the  
4   deflectable member cutting off the lead wires.

1        15. The thermometer as recited in claim 9 wherein a groove  
2 is defined in the bendable probe body's end portion and a  
3 corresponding hook formed at an end of the deflectable metal  
4 wire is embedded in the groove.

1        16. The thermometer as recited in claim 9 wherein the  
2 deflectable metal wire has a diameter of from 0.5 mm to 2.0  
3 mm.

1        17. A deflectable thermometer probe comprising:  
2 a bendable probe body having a hollow pipe;  
3 a hollow tip member secured to the bendable probe body;  
4 a deflectable member having a main portion disposed in  
5 the hollow pipe of the bendable probe body; and  
6 a space formed between the hollow pipe and the main  
7 portion of the deflectable member for deformation of  
8 the main portion.